UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,914	02/02/2001	Takeshi Saito	202762US2RD	8114

22850 7590 02/06/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
DURAN, ARTHUR D	

ART UNIT	PAPER NUMBER
3622	

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/773,914	SAITO ET AL.
	Examiner	Art Unit
	Arthur Duran	3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-39 have been examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-17 and 19-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tracy (5,979,757).

Claim 1, 2, 3, 4, 17, 19, 20, 23, 24, 28, 29, 35, 37, 38, 39: Tracy discloses an electronic coupon sending/collecting method, system, device for sending/collecting an electronic coupon to/from a radio portable terminal by using a radio LAN, the method comprising the steps of:

(a) requesting a notification of a terminal identifier of the radio portable terminal from a radio base station of the radio LAN to the radio portable terminal through the radio LAN (col 1, lines 20-36; col 2, lines 56-64);

(b) receiving the notification of the terminal identifier of the radio portable terminal from the radio portable terminal at the radio base station through the radio LAN in response to the step (a) (col 1, lines 20-36; col 2, lines 56-64);

(c) requesting a check of whether the radio portable terminal of the terminal identifier notified by the step (b) is an electronic coupon sending/collecting target or not, from the radio base station to a server device (col 9, lines 55-60; col 9, lines 27-30);

(d) checking whether the radio portable terminal of the terminal identifier notified by the step (b) is the electronic coupon sending/collecting target or not at the server device, and notifying a result of the check from the server device to the radio base station in response to the step (c) (col 9, lines 55-60; col 9, lines 27-30); and

(e) carrying out processing for sending/collecting the electronic coupon at the radio base station with respect to the radio portable terminal through the radio LAN, when the result of the check notified by the step (d) indicates that the radio portable terminal of the terminal identifier notified by the step (b) is the electronic coupon sending/collecting target (col 10, lines 9-15; col 9, lines 27-30).

Tracy further discloses a server device for managing information regarding the electronic coupon (Fig. 1; col 12, lines 50-55).

Tracy further discloses a processing unit configured to carry out a processing for receiving any new electronic coupon issued by the store, a processing for using any stored electronic coupon that is usable at the store, and a processing for deleting any used electronic coupon from the storage unit, with respect to the radio base station through the radio LAN using the communication unit (col 12, line 50-col 14, line 2).

Tracy further discloses sending an electronic coupon automatically from one radio base station arranged at one location in the facility to the radio portable terminal that has moved into a

covered area of the one radio base station by using the radio LAN (col 9, lines 25-30; col 9, lines 55-60; col 10, lines 9-14); and

collecting the electronic coupon from the radio portable terminal at another radio base station arranged at another location in the facility by using the radio LAN (col 5, lines 46-53; Fig. 1; col 6, lines 25-51).

Tracy further discloses a plurality of radio base stations of a radio LAN are arranged at a plurality of locations inside the facility and the plurality of radio base stations are connected to a server device through a local network (Fig. 1; col 5, lines 45-57).

Tracy further discloses (c) recording and managing a management information containing the terminal identifier notified at the step (b) (col 14, lines 3-48) and information regarding an arranged location of said each radio base station (col 5, lines 46-53; Fig. 1; col 6, lines 25-51) and notifying the terminal identifier at the step (b), at the server device (col 18, lines 13-21; col 14, lines 18-29; col 14, lines 54-65; col 9, lines 55-61).

Tracy does not explictly disclose information regarding an arranged location of said each radio base station which notified the terminal identifier at the step (b), at the server device.

However, Tracy further discloses multiple radio base stations (col 5, lines 50-56) and providing direction/location information to service units (col 7, lines 5-17) and providing location information of items (col 10, lines 49-55) and that radio base stations can be in different stores (col 6, lines 7-14) keeping track of service desk locations (col 11, lines 53-58) identifying the location of all store shoppers and employees (col 12, lines 45-50) providing the locations of service centers (col 12, lines 63-67) and providing item information and location based upon shopper activity history (col 14, lines 18-29; col 14, lines 54-65) and providing location of items

based upon other items of interest to the user (col 16, lines 43-54) and tracking customer preferences and activitites (col 9, lines 5-17) including dynamically determining the user's preferences (col 9, lines 55-61) and that the store goods in the store are organized intelligently in terms of their placement (col 15, lines 1-8; col 15, line 65-col 16, line 3) and providing location specific messages to the user (col 18, lines 13-21).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Tracy's providing location specific information to the user to Tracy's multiple radio base stations and Tracy's forming a dynamic profile of user activity and Tracy's organized store such that Tracy tracks what base stations provide information to the user in order to form a profile of user areas of interest in the store. One would have been motivated to do this so that a better preference profile of the user is made and better targeting of the user is possible.

Tracy further discloses a coupon identifier (col 9, lines 26-28; col 12, lines 50-55; col 13, lines 1-5). Electronic coupons and coupon tracking and management imply a way to identify the coupon.

Claim 5: Tracy discloses the system of the claim 2, and Tracy further discloses that the first communication unit of the radio base station is also configured to send a fifth request message requesting a notification of a display contents description format to the radio portable terminal through the radio LAN, and to receive a fifth response message notifying the display contents description format from the radio portable terminal through the radio LAN in response to the fifth request message; and

the processing unit of the radio base station is also configured to carry out processing for sending the electronic coupon that contains display contents described by the display contents description format notified by the fifth response message, to the radio portable terminal (col 11, lines 23-28; col 2, lines 1-5; col 11, lines 37-40).

Claim 6, 21: Tracy discloses the system, device of claim 5, 20, and Tracy further discloses that the second communication unit of the radio base station is also configured to send to the server device a sixth request message containing the terminal identifier notified by the first response message and the display contents description format notified by the fifth response message and requesting a transmission of data of the electronic coupon to be sent to the radio portable terminal of the terminal identifier notified by the first response message, when the radio portable terminal of the terminal identifier notified by the first response message is the electronic coupon sending/collecting target, and to receive a sixth response message containing the data of the electronic coupon from the server device in response to the sixth request message;
the communication unit of the server device is also configured to receive the sixth request message from the radio base station and to send the sixth response message to the radio base station in response to the sixth request message;
the coupon processing unit of the server device is also configured to determine a coupon identifier of the electronic coupon to be sent to the radio portable terminal of the terminal identifier contained in the sixth response message, and to produce the sixth response message containing the data of the electronic coupon of the coupon identifier that contains display contents described by the display contents description format contained in the sixth request message (col 11, lines 23-28; col 2, lines 1-5; col 11, lines 37-40).

Claim 7: Tracy discloses the system of claim 2, and Tracy further discloses the processing unit of the radio base station is also configured to carry out processing for sending the electronic coupon that contains at least a coupon identifier for uniquely identifying the electronic coupon and display contents regarding the electronic coupon (col 11, lines 23-28; col 2, lines 1-5; col 11, lines 37-40). Tracy further discloses a coupon identifier (col 9, lines 26-28; col 12, lines 50-55; col 13, lines 1-5). Electronic coupons and coupon tracking and management imply a way to identify the coupon.

Claim 8: Tracy discloses the system of claim 7, and Tracy further discloses the processing unit of the radio base station is also configured to carry out processing for sending the electronic coupon that also contains a control information regarding a use of the electronic coupon (col 12, lines 60-68).

Claim 9: Tracy discloses the system of claim 7, and Tracy further discloses the processing unit of the radio base station is also configured to carry out processing for sending the electronic coupon that also contains an electronic signature obtained by encrypting at least a portion of data of the electronic coupon that should be protected from alteration, by using a secret key that is maintained in the radio base station and/or the server device (col 6, lines 20-25).

Claim 10: Tracy discloses the system of claim 7, and Tracy further discloses that the processing unit of the radio base station is also configured to carry out processing for sending the electronic coupon that also contains an electronic signature obtained by encrypting at least a portion of data of the electronic coupon that should be protected from alteration and the terminal

identifier of the radio portable terminal, by using a secret key that is maintained in the radio base station and/or the server device (col 6, lines 20-25).

Claim 11: Tracy discloses the system of the claim 2, and Tracy further discloses that the first communication unit of the radio base station is also configured to send a seventh request message requesting information of the electronic coupon to be collected by the radio base station to the radio portable terminal through the radio LAN, and to receive a seventh response message containing at least first information necessary in identifying the electronic coupon to be collected and second information necessary in verifying validity of the electronic coupon to be collected, from the radio portable terminal through the radio LAN; and

the second communication unit of the radio base station is also configured to send to the server device an eighth request message containing at least the first information and the second information contained in the seventh response message and requesting a verification of the validity of the electronic coupon to be collected, and to receive an eighth response message containing a result of the verification from the server device in response to the eighth request message;

the communication unit of the server device is also configured to receive the eighth request message from the radio base station and to send the eighth response message to the radio base station in response to the eighth request message;

the coupon processing unit of the server device is also configured to verify the validity of the electronic coupon to be collected according to the first information

and the second information contained in the eighth request message, and to produce the eighth response message containing the result of the verification; and

the processing unit of the radio base station is also configured to command the radio portable terminal to delete data of the electronic coupon to be collected through the radio LAN, when the result of the verification notified by the eighth response message indicates that the validity of the electronic coupon to be collected is confirmed (col 12, line 50-col 13, line 56).

Tracy does not explicitly disclose deleting coupons after using them. However, Tracy discloses using coupons and managing coupon use as disclosed above. Tracy further discloses deleting coupons (col 11, lines 5-9).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Tracy's deleting coupons to Tracy's using coupons and managing coupon use. One would have been motivated to do this because deleting a coupon after use prevents the inappropriate, multiple use of the same coupon over and over again.

Claim 12: Tracy discloses the system of claim 11, and Tracy further discloses a register device configured to execute a transaction for a user of the radio portable terminal;
wherein the coupon processing unit of the server device is also configured to command the register device to provide a service corresponding to the electronic coupon to be collected when the validity of the electronic coupon to be collected is confirmed (col 13, lines 1-11; col 12, lines 62-66).

Claim 13: Tracy discloses the system of claim 11, and Tracy further discloses that the second information contained in the seventh response message and the eighth request message includes an electronic signature obtained by encrypting at least a portion of data of the electronic coupon that should be protected from alteration, by using a secret key that is maintained in the server device, and data required for verifying the electronic signature; and

the coupon processing unit of the server device is also configured to verify the validity of the electronic coupon to be collected by verifying the electronic signature (col 13, lines 1-11; col 12, lines 62-66; col 6, lines 20-25).

Claim 14: Tracy discloses the system of claim 11, and Tracy further discloses that the second information contained in the seventh response message and the eighth request message includes an electronic signature obtained by encrypting at least a portion of data of the electronic coupon that should be protected from alteration and the terminal identifier of the radio portable terminal, by using a secret key that is maintained in the server device, and data required for verifying the electronic signature; and

the coupon processing unit of the server device is also configured to verify the validity of the electronic coupon to be collected by verifying the electronic signature (col 13, lines 1-11; col 12, lines 62-66; col 6, lines 20-25).

Claim 15: Tracy discloses the system of claim 11, and Tracy further discloses that the processing unit of the radio base station is also configured to carry out processing for collecting the electronic coupon that is currently displayed on a display screen of the radio portable terminal (col 6, lines 25-51).

Claim 16: Tracy discloses the system of claim 2, and Tracy further discloses that the first communication unit of the radio terminal device is configured to send the first request message to the radio portable terminal that has moved into a covered area of the radio terminal device; the second communication unit of the radio base station is also configured to receive data or coupon identifiers of electronic coupons to be sent to the radio portable terminal from the server device in response to the second request message;

the coupon processing unit of the server device is configured to check whether the radio portable terminal of the terminal identifier contained in the second request message is the electronic coupon sending/collecting target or not by referring to information regarding the terminal identifier of the radio portable terminal contained in the second request message, to determine the electronic coupons to be sent to the radio portable terminal that is the electronic coupon sending/collecting target, and to judge whether each electronic coupon to be sent has been sent to the radio portable terminal within a prescribed period of time by referring to information registering the terminal identifier of the radio portable terminal, coupon identifiers indicating electronic coupons that have already been sent to the radio portable terminal and information on times at which the electronic coupons that have already been sent to the radio portable terminal were sent; and the communication unit of the server device is also configured to send the data or the coupon identifiers of only those electronic coupons to be sent that are judged as not having been sent to the radio portable terminal within the prescribed period of time, to the radio base station in response to the second request message (col 10, lines 44-col 11, line 9; col 18, lines 13-21; col 4, lines 23-28). Also, please note that time is related to location or aisle specific messages because it the shopper will only be in that aisle for a limited amount of time.

Claim 22: Tracy discloses the device of claim 19, and Tracy further discloses that the processing unit of the radio portable terminal device is also configured to carry out a processing for using any stored electronic coupon that is currently displayed on the display screen by the display unit, and to delete data of any stored electronic coupon that is currently displayed on the display screen from the storage unit, upon receiving a third request message commanding a

deletion of the data of a used electronic coupon (col 12, lines 50- col 13, line 11; col 11, lines 5-9).

Claim 25, 30: Tracy discloses the system of claim 24, and Tracy further discloses that each radio base station also has:

a processing unit configured to make a judgement as to whether the radio portable terminal that has moved into the covered area of said each radio base station is staying in the covered area of said each radio base station for over a prescribed period of time or not;

wherein the second communication unit of each radio base station is configured to notify the terminal identifier received by the first communication unit only when the processing unit judges that the radio portable terminal that has moved into the covered area of said each radio base station is staying in the covered area of said each radio base station for over a prescribed period of time (col 10, lines 44-col 11, line 9; col 18, lines 13-21; col 4, lines 23-28; col 12, lines 60-65; col 14, lines 29-35; col 13, lines 55-62). Also, please note that time is related to location or aisle specific messages because it the shopper will only be in that aisle for a limited amount of time.

Claim 26: Tracy discloses the system of claim 25, and Tracy further discloses the processing unit of each radio base station is configured to make the judgement repeatedly, and the second communication unit of each radio base station is configured to notify the terminal identifier received by the first communication unit whenever the processing unit judges that the radio portable terminal that has moved into the covered area of said each radio base station is staying in the covered area of said each radio base station for over a prescribed period of time

(col 10, lines 44-col 11, line 9; col 18, lines 13-21; col 4, lines 23-28; col 12, lines 60-65; col 14, lines 29-35; col 13, lines 55-62).

Claim 27: Tracy discloses the system of claim 24, and Tracy further discloses that the management unit of the server device is configured to record and manage the management information that also contains a time information indicating a time at which the radio portable terminal is detected in the covered area of said each radio base station (col 14, lines 29-35; col 13, lines 55-62).

Claim 31, 32, 34: Tracy discloses the system of claim 28.

Tracy does not explicitly disclose where radio base stations are located.

However, Tracy further discloses multiple radio base stations (col 5, lines 50-56) and providing direction/location information to service units (col 7, lines 5-17) and providing location information of items (col 10, lines 49-55) and that radio base stations can be in different stores (col 6, lines 7-14) keeping track of service desk locations (col 11, lines 53-58) identifying the location of all store shoppers and employees (col 12, lines 45-50) providing the locations of service centers (col 12, lines 63-67) and providing item information and location based upon shopper activity history (col 14, lines 18-29; col 14, lines 54-65) and providing location of items based upon other items of interest to the user (col 16, lines 43-54) and that the store goods in the store are organized intelligently in terms of their placement (col 15, lines 1-8; col 15, line 65-col 16, line 3) and providing location specific messages to the user (col 18, lines 13-21).

Tracy further discloses a service station located at a doorway of the facility (col 6, line 65-col 7, line 5).

Therefore, it would be obvious of Trace to place radio base stations at corners of the facility to make sure the entire facility is covered or to place a radio base station near the entrance to make sure that service is available upon entry or exit or to place the radio base station near the register device to make sure that service is available when using the register device.

Claim 33. Tracy discloses the system of claim 32, wherein the management information contains at least the terminal identifier of the radio portable terminal of the user, the location information indicating a corner at which said each radio base station is arranged (see the rejection of the Independent and dependent claims above), a time information indicating a time at which the radio portable terminal is detected in the covered area of said each radio base station (col 10, lines 44-col 11, line 9; col 18, lines 13-21; col 4, lines 23-28; col 12, lines 60-65; col 14, lines 29-35; col 13, lines 55-62), and a product information regarding products purchased by the user that is entered from a register device for executing a transaction for the user of the radio portable terminal (col 14, lines 18-29; col 14, lines 54-65; col 16, lines 43-54).

Claim 36: Tracy discloses the system of claim 35, and Tracy further discloses that the management information also contains information regarding electronic coupons sent to a radio portable terminal of each terminal identifier and information regarding electronic coupons collected from a radio portable terminal of each terminal identifier (col 12, line 50-col 13, line 11).

3. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tracy (5,979,757) in view of Murdock (4,189,730).

Claim 18: Tracy discloses the radio base station device of claim 17. Tracy further discloses multiple radio base stations and multiple portable devices (col 5, lines 48-56) and multiple facilities (Fig. 1).

Tracy does not explicitly disclose a radio shielding unit configured to shield radio signals from at least one direction.

However, Murdock discloses radio shielding unit configured to shield radio signals from at least one direction (col 1, lines 23-27).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Murdock's shielding radio signals to Tracy's multiple radio base stations in a facility and multiple radio stations in multiple facilities. One would have been motivated to do this so that interference from other radio signals can be reduced.

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a. Fano (6,317,718) discloses providing incentives to a user based on use location.

b. Peckover (6,119,101) discloses tracking multiple user preferred devices.

c. Gottsman (6,134,548) discloses location based incentives in a retail, non-web environment.

d. Begum (5,420,606) discloses wireless coupon offerings.

e. Ogasawara (6,123,259) discloses location based incentives.

f. Schultz (5,679,943) discloses location based incentives to a portable terminal.

g. Herz (6,571,279) discloses location based incentives.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur Duran whose telephone number is (703)305-4687. The examiner can normally be reached on Mon- Fri, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (703)305-8469. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

AD

11/14/03

JAMES W. MYHRE
PRIMARY EXAMINER